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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,852	06/02/2000	ANTOON JOHANNES GERARDUS VAN ROSSUM	05032.86955	8871
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BANNER & '		EXAMINER		
28 STATE STREET 28TH FLOOR			KORNAKOV, MICHAIL	
BOSTON, MA	02109		ART UNIT	PAPER NUMBER
			1746	10
			DATE MAILED: 04/24/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	licant(s)			
Offic Action Summary		09/508,852	ANTOON JOHANNES GERARDUS VAN ROSSUM			
		Examiner	Art Unit			
		Michael Kornakov	1746			
Period fo	The MAILING DATE of this communication app r Reply	pears on the cover sheet with the c	orrespondence address			
THE N - Exten after: - If the - If NO - Failur - Any re earne	ORTENED STATUTORY PERIOD FOR REPL'MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status	Page and the communication (a) filed on 07 (March 2002				
1)⊠ 2a)⊟	Responsive to communication(s) filed on <u>07 I</u> This action is FINAL . 2b)⊠ Th	vis action is non-final.				
	,		resocution as to the morits is			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4)⊠ Claim(s) 1-29 is/are pending in the application.						
4a) Of the above claim(s) <u>15-17 and 20-29</u> is/are withdrawn from consideration.						
5)	5) Claim(s) is/are allowed.					
6)⊠	6)⊠ Claim(s) <u>1-14,18 and 19</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8) 🛛	Claim(s) <u>1-29</u> are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
· ·	inder 35 U.S.C. §§ 119 and 120		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☒ None of:						
	1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No.					
 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 						
Attachment	t(s)					
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u>	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			
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DETAILED ACTION

Election/Restrictions

- 1. Applicant's election without traverse of Claims 1-14 and 18, 19 in Paper No. 9 is acknowledged.
- 2. Claims 15-17 and 20-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim.. Election was made **without** traverse in Paper No. 9.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1, 2, 5 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "complex former" as per claim 1 constitutes an indefinite subject matter, because the definition and /or explanation of such is not provided in the instant specification. The specification merely recites "complex former".

The recited "preferably" as per line 8 in claim 2 and line 17 in claim 5 to link the broader range of value with the narrow range of value renders the claim to be indefinite. It is not clear, which range controls the actual metes and bounds of the claimed subject matter.

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5. Regarding claim 9, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0578 498.

EP'498 discloses a protective coating, which is an **alkali soluble adhesive**, or an alkali soluble film, comprising an **acrylic polymer as a binder**, which acrylic polymer is obtained by bulk polymerization and has a number average molecular weight **1,000**-**1,000,000** and M_w/M_n ratio of **less than 5**. A glass transition temperature of the **binder is -80°C or higher** (see abstract).

Table 2 on pages 19 and 20 provides the compositions of a binder and its characteristics. It is seen that the binder includes the monomers, as instantly claimed and that the characteristics of a binder, such as weight average molecular weight, poly dispersity and glass transition temperature are clearly within the claimed range. As for the acid value number, a broad teaching of EP'498 is that the acid value is higher than 65 mg/g, and there are several specific examples, such as example 2-14 and 2-15

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presented in table 2-5 on page 42, which cite the acid values of **150mg/g**, which is a specific point within the claimed range. The acrylic polymer of EP'496 when used in compositions for coatings and adhesives or water inks employs different additives, such as reinforcing agents, fillers, antioxidants, plasticizers, lubricants (page 4, lines 36-39), such as carbon black, silica based anhydrous salycilic acid **calcium carbonate** (which is named as a pigment in the instant claim 9), imidazoles, naphthylamides, stearic acid, etc. (page 4, lines 49-55), pigments, dyes or the like (page 7, lines 30, 31).

With regard to claim 8 EP'598 teaches that for an alkali soluble adhesive the polymer binder is combined with solvent wax, tackifyer, and if 100 parts of a polymer is combined with 0-400 parts of solvent, 0-50 parts of wax, and 0-50 parts of tackyfier as described on page 5, lines 56-58, then the amount of a binder as set forth in the instant claim 8 is clearly within the claimed range. Example 2-21 shows the production of a polymer, as **pigment dispersing** agent, which has weight average molecular weight 32,000, polydispersity 2.2, and acid value of 160mg/g.

In specific regard to claims 10-13, EP'498 utilizes titanium dioxide as a pigment (page 7, lines 40-42), and when mixed with a pigment the recipe of a composition may contain 40-200 parts of coloring material, 0-100 parts of rein, etc, described on page 7, lines 33-36. These numbers give the ratio of a pigment to a resin within the range of the instant claim 10. For the defoaming agents surfactants can be used (page 7, lines 44,45). The surfactants are named as pigment dividers in the instant specification, therefore EP'498 covers the subject matter of the instant claim 13.

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Claim R j ctions - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim-that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 12. Claims 1-14 are rejected under 35 U.S.C. 102(b) as anticipated by EP 0478 067 or in the alternative under U.S.C. 103(a) as obvious over EP 0478 067.

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EP'067 discloses a protective coating and a method of forming such coating against solar radiation for glass plates and outer surfaces of horticultural greenhouses (compare with the instant claims 18, 19) by spraying a composition and drying it on the said substrate (see abstract, page 2, lines 1-4). The product of EP'067 consist of a polymer and an inorganic substance, which in dried condition of the product is light reflective, in particular the additives are one or more inorganic pigments, at least one binding agent (adhesion promoter), at least one surface active agent (pigment divider), a preserving agent, etc. (page 2, lines 41-45). The product used to remove the coating made of above described product is formed from a basic component, at least one complex former and at least one surface active agent (page 2, lines 49-51). AS an example of a binder forming polymer the copolymer of **styrene** and maleic anhydride is used, (see Example in the Composition product 1,lines 15-25 of page 3). The finely divided calcium carbonate, which is used as a pigment is utilized in the amount of 30-60 % by weight, which is clearly within the range of the instant claim 10.

Thus all the limitations of the instant claims in terms of the composition, its removability, and structure of a binder are expressly met by the disclosure of EP'067.

The EP'067 does not specifically name the values of weight average molecular weight, acid value, glass transition temperature and polydispersity. However, since the polymer is within the scope of the instant claims its characteristics are inherently the same as instantly claimed. The above rejections were made in the sense of *In re Fitzgerald* 205 USPQ 594 (CAFC). The burden to show that these characteristics are different is shifted to Applicants. Consult also *In re Spada*, 911 F 2d 705, 709 15 USPQ 1655,

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1658 (Fed. Cir. 1990), which settles that <u>when</u> the claimed compositions <u>are not novel</u>, they are not rendered patentable by recitation of properties, whether or <u>not</u> these properties are shown or suggested in prior art.

13. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP'0533 367 in view of EP 0478067.

EP'367 discloses forming a protective coating by drying of a copolymer, which is formed from alpha, beta-unsaturated monomers, carboxylic acid monomers and amphiphilic monomers. The protective coating has an average molecular weight 7,000-25,000 and provides desired properties of rapid drying, substantial film strength and easy removal with alkaline solutions (see abstract). The composition according to EP'367 contains additives, such as surfactants, UV absorbers, corrosion inhibitors, antioxidants, anti-foaming agents (page 2, lines 50-53). Some monomers, suitable for the production of polymer, named on page 3, lines 18-20. The coating composition was tested for its drying property, its resistance to acidic rain rust, and for its removability with alkaline solution (page 4, lines 36-40). For this purpose the transparent plates were coated and dried, and after that the protective coating was removed from the plates (page 4, lines 39-58). Tables on page 6 and 7 provide the characteristics of a composition, such as molecular weight, glass transition temperature, acid value, with all these characteristics clearly within the claimed range. Also presented are drying properties and resistance to acid rain, which are superior for the obtained composition.

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EP'367 does not disclose the presence of a pigment in the composition. However, EP'367 provides a motivation to include a pigment, and in particular a pigment for making a composition for protective coating, which is suitable for outside transparent walls, by stating that its protective coating shows a good resistance for acid rain and other weather related conditions, as discussed above.

EP'067 discloses a protective coating and method of its forming having a binder polymer and a calcium carbonate pigment in the amount as instantly claimed (see paragraph 9 of the instant Office Action). Based on the similarity of the used binders, their intended uses, removability by alkaline solution, one skilled in the art would have found it obvious based on the suggestion of EP'367 to include a pigment of EP'067 into a binder composition of Ep'367 to impart the solar resistance properties to this composition along with already existing property of acid rain resistance.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dueber (U.S. 6,218,074) discloses a resin composition for protective coating comprising low and high-molecular weight acrylate binders and pigment; Elmasry (U.S. 6,348,432) discloses a heat sensitive protective coating made of acrylic esters and containing a pigment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (703) 305-0400. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (703) 308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872 9310 for regular communications and (703) 872 9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 2450.

Michael Kornakov Examiner Art Unit 1746

MK April 22, 2002

> RANDY GULAKOWSKI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1700